**In The Claims:**

1. (Cancel)

2. (Cancel)

3. (Currently Amended) A system as recited in claim [[1]] 5 wherein said thermistor is coupled to a heat exchanger.

4. (Cancel)

5. (Currently Amended) ~~A system as recited in claim 1 wherein~~ An X-ray system comprising:

an X-ray tube temperature sensor generating a temperature signal; and

a fan coupled to said temperature sensor, said fan having a speed that varies in response to said temperature signal, said temperature sensor ~~comprises~~ comprising a thermistor in parallel with a shape resistor, said thermistor and shape resistor being in series with a gain resistor.

6. (Original) A system as recited in claim 5 further comprising a shunt in parallel with said thermistor and said shape resistor, said shunt has an open positioned and a closed position.

7. (Original) A system as recited in claim 6 wherein said shunt is normally opened.

8. (Original) A system as recited in claim 6 wherein said shunt is thermally activated.

9. (Original) A system as recited in claim [[1]] 5 wherein said temperature sensor has a non-linear output.

10. (Cancel)

11. (Cancel)

12. (Currently Amended) A system as recited in claim [[10]] 14 wherein said thermistor is coupled to a heat exchanger.

13. (Cancel)

14. (Currently Amended) ~~A system as recited in claim 10 wherein~~ A CT system comprising:

an X-ray tube;

a heat exchanger coupled to the X-ray tube;

a temperature sensor generating a temperature signal;

a fan coupled to said temperature sensor, and

a controller generating a fan speed that varies in response to said temperature signal, said temperature sensor ~~comprises~~ comprising a thermistor in parallel with a shape resistor, said thermistor and shape resistor being in series with a gain resistor.

15. (Original) A system as recited in claim 14 further comprising a shunt in parallel with said thermistor and said shape resistor, said shunt has an open positioned and a closed position.

16. (Original) A system as recited in claim 15 wherein said shunt is normally opened.

17. (Original) A system as recited in claim 15 wherein said shunt is thermally activated.

18. (Cancel)

19. (Currently Amended) ~~A method as recited in claim 18~~ A method of operating an X-ray system comprising:

measuring a temperature of an X-ray tube;

controlling a fan speed in response to said temperatur ; and



 

when a temperature reaches a predetermined temperature, maintaining a predetermined fan speed.

20. (Currently Amended) ~~A method as recited in claim 18 wherein controlling comprises controlling the fan speed~~ A method of operating an X-ray system comprising:

measuring a temperature of an X-ray tube; and

non-linearly controlling a fan speed in response to said temperature.